

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/767,459	01/30/2004	Robert S. Anderson	P-6464-US2	3936
49443	7590 01/13/2006		EXAMINER	
PEARL COHEN ZEDEK, LLP 10 ROCKEFELLER PLAZA			JOHNSON III, HENRY M	
SUITE 1001	EEEEK I ENEK		ART UNIT	PAPER NUMBER
NEW YORK, NY 10020			3739	

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/767,459	ANDERSON ET AL.				
Office Action Summary	Examiner	Art Unit				
	Henry M. Johnson, III	3739				
The MAILING DATE of this communication app Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 14 No	ovember 2005.					
	· · · · · · · · · · · · · · · · · · ·					
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-68</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-68</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>30 January 2004</u> is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)    Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   Paper No(s)/Mail Date 111904 111405	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:					

Art Unit: 3739

### **DETAILED ACTION**

## Specification

The disclosure is objected to because of the following informalities:

In paragraph 0007, "they peak absorption" is improper wording.

In paragraph 0061, the examiner believes the figure should be 2, not 1.

In paragraph 0070, the acronym ILP is improper.

Appropriate correction is required.

## **Drawings**

The drawings are objected to because shading in the drawings is not reproducible as required by 37 CFR 1.84. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10, 12-15, 42-45 and 58-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 12 recite the limitation "the undesirable tissue" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 42 recites the limitation "the undesirable tissue" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 46 recites the limitation "said energy transmitting elements" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 58 is unclear as written due to transmitting light between elements, yet only a single element is cited.

### Double Patenting

Claim 10 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 12.

Claim 37 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 41. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Application/Control Number: 10/767,459

Art Unit: 3739

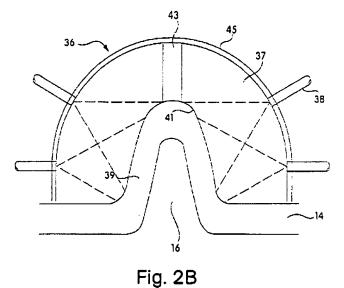
A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6-15, 16-18, 20-25, 27, 29, 30, 46, 47, 49 53-55 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,605,080 to Altshuler et al. Altshuler et al. teaches methods for treating tissue with electromagnetic radiation wherein tissue (Fig. 2B, # 39) is positioned near radiating elements (Fig. 2B,

# 38) and irradiated via the elements.

Tissue is drawn into the handpiece via a suction port (Fig. 2B, # 43), the tissue being pinched and folded in the process (Col. 13, lines 35-36). It is inherent that the tissue is also stretched as it is sucked into the device. The radiating element receives energy from a laser via optical fibers. The treatment head is optically transparent and



may be made of sapphire (Col. 13, line 37) and includes a highly reflective coating (Col. 13, lines 45-50) to achieve retroreflection of the radiation. The process is disclosed as altering or killing the fat cells which are subsequently removed (Col. 5, lines 1-12) by heating the cells to specific temperatures (Col. 12, lines 9-20). Altshuler et al. also teach cooling of the area (Col. 4, lines 15-20), said cooling provided by cryogenic or Peltier means (Col. 11, lines 12-20), either of which may be interpreted as a sub-system.

Regarding claims 10 and 12-15, the generation of proteins is considered inherent in the process of providing energy to tissue as no specific fluence levels or steps are cited for generation of the proteins.

Regarding claims 17 and 26, Altshuler et al. discloses multiple transmitting elements.

Receiving of radiation is not clear from the claim. If the intent is for bipolar operation, it should be so stated as a return path.

Regarding claim 29, electric current must be supplied to the laser via some conductive means. Such means is broadly interpreted as a portion of the path to the transmitting element.

Regarding claims 53-55, the tissue inherently has blood vessels that would be heated by the application of energy. Lacking specific steps to target vessels and dissipate lesions, these actions are considered inherent as energy is applied.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 3739

Claims 4, 31, 32 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,605,080 to Altshuler et al. as applied to claims 1, 25 and 46 above, and further in view of U.S. Patent 4,387,714 to Geddes et al. Altshuler et al. are discussed above, but do not teach conductive mediums between tissue and electrodes. The use of conductive mediums in the medical arts is well known and pervasive, such as the electrodes in a common electrocardiogram procedure. Geddes et al. specifically discloses conducting gels between an electrode and skin (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the conducting gel as taught by Geddes et al. in the process of Altshuler et al. as such gels are well known.

Claims 5, 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,605,080 to Altshuler et al. as applied to claims 1, 16 and 25 above, and further in view of U.S. Patent 6,689,131 to McClurken. Altshuler et al. are discussed above, but do not teach measurement of tissue volume. McClurken teaches an electrosurgical device with a tissue reduction (volume) sensor to detect a change in the dimension of the treated tissue (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the tissue volume sensor as taught by McClurken in the invention of Altshuler et al. to track the size of the fat tissue as that is the tissue being altered or killed by the method of Altshuler et al.

Claims 33, 34, 35, 37-45, 50-52, 56 and 57, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,605,080 to Altshuler et al. in view of U.S. Patent 5,948,011 to Knowlton. Altshuler et al. are discussed above, but do not teach non-laser energy application. Knowlton teaches method for delivering energy to tissue using multiple electrodes, that may be monopolar or bipolar, and RF energy (Col. 5, lines 34-36). It is inherent that current flows between the electrodes for the heating to occur and that means are provided to supply the electrode with the energy from the source. A conductive layer is provided between the skin and electrodes (Col. 3, lines 1-5). Cooling is provided on the delivery apparatus (abstract). Knowlton

teaches using the electrodes for heating subcutaneous tissue and this is interpreted as teaching the equivalency of laser and RF energy for heating of subcutaneous tissue. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the electrodes as taught by Knowlton in the apparatus and method of Altshuler et al. as an alternative equivalent to the laser for tissue treatment.

Regarding claim 56, the tissue inherently has blood vessels that would be heated by the application of energy.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,605,080 to Altshuler et al. in view of U.S. Patent 5,948,011 to Knowlton as applied to claim 33 above, and further in view of U.S. Patent 6,689,131 to McClurken. Altshuler et al. and Knowlton are discussed above, but do not teach measurement of tissue volume. McClurken teaches an electrosurgical device with a tissue reduction (volume) sensor to detect a change in the dimension of the treated tissue (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the tissue volume sensor as taught by McClurken in the invention of Altshuler et al./Knowlton to track the size of the fat tissue as that is the tissue being altered or killed by the method of Altshuler et al.

Claims 58-63, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,605,080 to Altshuler et al. in view of U.S. Patent 6,676,655 to McDaniel. Altshuler et al. are discussed above, but do not teach using blue light. McDaniel teaches a device and method for treating various dermatological conditions using low light therapy (abstract). A specific condition disclosed is tattoo removal (Col. 13, lines 35-40). The wavelengths disclosed are from 300 to 1600 nanometers, depending on the absorption of the tissue targeted. This range includes both UV and blue wavelengths. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wavelengths as taught by McDaniel in the method of Altshuler et al. for treating acne or tattoo removal as McDaniel specifically discloses blue light for acne treatment

Application/Control Number: 10/767,459

Art Unit: 3739

as is well know to provide single oxygen that is beneficial in the treatment of acne and 800 nanometers for tattoo removal.

Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,605,080 to Altshuler et al. in view of U.S. Patent 6,676,655 to McDaniel as applied to claim 62 above, and further in view of U.S. Patent 4,387,714 to Geddes et al. All have been previously discussed. The use of conductive mediums in the medical arts is well known and pervasive, such as the electrodes in a common electrocardiogram procedure. Geddes et al. specifically discloses conducting gels between an electrode and skin (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the conducting gel as taught by Geddes et al. in the process of Altshuler et al./McDaniel as such gels are well known.

Claims 66 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,605,080 to Altshuler et al. in view of U.S. Patent 6,676,655 to McDaniel and further in view of U.S. Patent 5,948,011 to Knowlton. All have been previously discussed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the electrodes and RF energy for generating a current as taught by Knowlton in the method of Altshuler et al. and McDaniel as the RF energy has already been established as an alternative equivalent to laser energy.

Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,605,080 to Altshuler et al. in view of U.S. Patent 6,676,655 to McDaniel in view of U.S. Patent 5,948,011 to Knowlton as applied to claim 66 above, and further in view of U.S. Patent 4,387,714 to Geddes et al. All have been previously discussed. The use of conductive mediums in the medical arts is well known and pervasive, such as the electrodes in a common electrocardiogram procedure. Geddes et al. specifically discloses conducting gels between an electrode and skin (abstract). It would have been obvious to one having ordinary skill in the art at the time the

Application/Control Number: 10/767,459 Page 9

Art Unit: 3739

invention was made to use the conducting gel as taught by Geddes et al. in the process of Altshuler et al./McDaniel/Knowlton as such gels are well known.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,652,518 to Wellman et al. teaches a suction hold device for delivering energy to tissue.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Henry M. Johnson, III

Patent Examiner

Art Unit 3739